Index to Volume 16 The American Journal of Human Genetics

Abnormalities, offspring from irradiated mothers, 214

ABO blood groups

in Cyprus, 267

incompatibility and Rh types, 155

linkage to Bua, 256

linkage to 6PGD, 472

and personality factors, 397

and selection, 161

in Xavante Indians, 52

in XX/XY mosaic, 38

Abortions

from irradiated mothers, 214

spontaneous risks, 1

Acid mucopolysaccharide excretion in hereditary multiple exostosis, 351

Acid phosphatase types of red cells

in British population, 141, 266

in Negroes, 141

techniques, 141

in Tristan da Cunhan Islanders, 141

Afghanistans, haptoglobin subtypes in, 477

Age

and dental caries, 231

and hairy pinnae, 455

Ahaptoglobinemia, genetics of, 419

Alabama-Coushatta, haptoglobin subtypes in, 477

Allan Memorial Award, 487

Allen, F. H., Jr., 195

Anencephaly in France, 336

Anthropometry of Xavantes, 52

Antibody studies in Xavantes, 52

Apes, Rh-Hr blood groups, 246

Araucanians, haptoglobin subtypes in, 477 Australian aborigines, haptoglobin subtypes

in, 477

Aweikoma, secretor status, 301

Azevêdo, E., 451

Balankura, K., 311

Barnicot, N. A., 156

Bearn, A. G., 477

Beattie, K. M., 38

Bender, M. A., 156

Birth order

and abortion risk, 1

and anencephaly, 336

Birth weights and irradiated mothers, 214

Blood group antigens, 261

Books Reviewed, Titles

An Rh-Hr Syllabus: The Types and Their Applications, 159

Biology of Mental Defect, 265

Birth Defects, 396

Changing Perspectives on the Genetic Ef-

fects of Radiation, 265

Classification and Human Evolution, 394

Counseling in Medical Genetics, 159

Die angeborenen Stoffwechselanomalien, 485

Dystrophia Myotonica and Related Disorders, 262

Erbliche Stoffwechselkrankheiten, Genetic Defects of Biologically Active Proteins, 158

Genetics and Dental Health, 266

Genetics and Metabolism, 485

Genetics of Migrant and Isolate Populations, 160

Groups Sanguins et Immunisation Groupale au Congo, 160

Handbook of Physiology, 160

Heredity and Development, 265

Heredity and Human Life, 396

Human Heredity, 261

Human Intersex, 261

Le Emoglobine Umane, 486

Mankind Evolving: The Evolution of the Human Species, 263

Medical Genetics, 159

Methodology in Mammalian Genetics, 486

Origin of Adaptations, 395

Outline of Human Genetics, 485

Principles of Quantitative Genetics, 396

Progress in Medical Genetics, 393

Psoriasis, Prevalence, Spontaneous Course

rsoriasis. Frevaience, Spontaneous Col

and Genetics, 264

Senile Dementia: A Clinical, Sociomedical, and Genetic Study, 263

Tables for Testing Significance in a 2 × 2 Contingency Table, 263

Books Reviewed, Authors

Ashley, D. J. B., 261

Bearn, A. G., 393

Bennett, B. M., 263

Bianco, I., 486

Burdette, W. G., 486

Carson, H. L., 396 Carter, C. O., 261 Caughey, J. E., 262 Dobzhansky, T., 263 Dow, P., 160 Finney, D. J., 263 Fishbein, M., 396 Goldschmidt, E., 160 Grant, V., 395 Hamilton, W. F., 160 Hsu, P., 263 Jacobson, G., 263 Larsson, T., 263 Latscha, R., 263 Lenz, W., 159 Linneweh, F., 158 Lomholt, G., 264 Mather, W. B., 396 Mitchell, H. K., 485 Moore, J. A., 265 Myrianthopoulos, N. C., 262 Neel, J. V., 265 Penrose, L. S., 265, 485 Reed, S. C., 159 Resseler, J. J. C., 160 Schreier, K., 485 Silvestroni, E., 486 Sjögren, T., 263 Steinberg, A. G., 393 Wagner, R. P., 485 Washburn, S. L., 394 Wexler, I. B., 159 Wiener, A. S., 159 Witkop, C. J., Jr., 266 Boonyaprakob, U., 311 Brandywine population, caries in, 231 Brewer, G. J., 472 British, acid phosphatase types in, 141 Brown, W. V., 395 Bua, genetic studies, 254, 256 Buettner-Janusch, J., 394

Caingangs, secretor status, 301
Cardiovascular studies in Xavantes, 52
Caries, genetic study, 231
Carr, D. H., 156
Cattell, R. B., 347
Caucasians, Bu^a frequency, 256
Centerwall, W. R., 455
Chimpanzees, haptoglobin types, 477
Chinese, haptoglobin subtypes, 477
Cholesterol in Xavantes, 52
Cholinesterase, silent gene, 180
Chown, B., 254, 256, 261

Chromosomes London Conference, 156 Partial deletion of 18, 364 Turner's syndrome and twinning, 380 and virus infections, 204 XX/XY mosaicism, 38 XXYY dermatoglyphics, 284 and yellow fever vaccination 204 Chu, E. H. Y., 156 Chung, C. S., 231 Cleve, H., 158 Cohen, M. M., 393 Colorblindness and Xg linkage, 403, 410 Congenital defects and abortion risk, 1 and anencephaly, 336 Consanguinity: See Inbreeding Cox, D. W., 214 Cypriots, genetic studies, 267

Dental caries, genetic study, 231 Dermatoglyphics of Xavantes, 52 of XXYY syndrome, 284 Dern, R. J., 472 Diamond, L. K., 195 Diego blood group in Xavantes, 52 Dislocation of hip and X-ray damage, 214 Dispermy and XX/XY mosaic, 38 Duffy blood groups in Cyprus, 267 linkage to Bua, 256 linkage to eosinophilia, 195 and selection, 161 in Xavantes, 52 in XX/XY mosaic, 38

Ears, hairy, 455
Eosinophilia, hereditary, 195
Erythrocyte enzymes, 472
Erythrocyte mosaicism, 38
Eskimoes
blood groups, 261
haptoglobin subtypes, 477
Esterases in Xavantes, 52
Eve examinations of Xavantes, 52

Family size in Xavantes, 52 Favism in Cyprus, 267 Ferguson-Smith, M. A., 156 Fliegelman, M. T., 264 Fluoridation and caries, 231 Ford, C. E., 156 Fraccaro, M., 156 Fraser, F. C., 1 Frézal, J., 336 Fy: See Duffy

Gc types in Xavantes, 52 German, J., 156 Gershowitz, H., 160, 161, 267 Gestation period and abortion risk, 1 Glucose-6-phosphate dehydrogenase dein Cyprus, 267 and 6PGD, 472 and selection, 435 in Xavantes, 52 Glucose-6-phosphate dehydrogenase variant,

Glycosuria, renal, inheritance, 189

Gm groups in Xavantes, 52 in XX/XY mosaic, 38 Goodman, H. O., 262 Gordon, E. B., 246

Griffits, J. J., 254 Growth, effects of inbreeding on, 292 Guarani, secretor status, 301

Guillemot, M. L., 336

Hairy pinnae, 455 Hamerton, J. L., 156 Haptoglobins in Cyprus, 267 modified heterozygotes, 419 in primates, 477 subtypes in various populations, 477 in Xavantes, 52 in XX/XY mosaic, 38 Harnden, D. G., 204 Harris, H., 141

Hematology of Xavantes, 52 Hemoglobin(s)

A and S in XX/XY mosaic, 38 Bart's in a thalassemia, 311

in Cyprus, 267 E and α thalassemia in Thais, 311

H in α thalassemia, 311 and selection, 435 in Xavantes, 52

Henry, J. L., 231 Herndon, C. N., 159, 160, 261, 263, 265, 266, 396, 485

Heterosis and MN blood groups, 375

Hiraizumi, Y., 375 Hirschhorn, K., 156

Hopkinson, D. A., 141-

Hundleby, J. D., 397

Inbreeding

and abortion risk, 1 and anencephaly, 336 computation of coefficient, 484 and dental caries, 231 effects on growth, 292 and hereditary multiple exostosis, 351

India

in Xavantes, 52 hairy ears in, 455 haptoglobin subtypes in, 477 Indians, haptoglobin subtypes in U.S. and Chilean, 477 Italians, haptoglobin subtypes in, 477 Inv groups in XX/XY mosaic, 38

Jackson, C. E., 403 Jacobs, P. A., 156 Japanese haptoglobin subtypes in, 477 inbreeding and growth, 292 Junquiera, P. C., 52

Kaita, H., 256, 261 Kalow, W., 180 Karp, G. W., Jr., 419 Keiter, F., 52 Kell blood groups in Cyprus, 267 linkage to Bua, 256 and selection, 161 in Xavantes, 52 Kelley, J., 336 Khachadurian, A. K., 189 Khachadurian, L. A., 189 Kidd blood groups in Cyprus, 267 linkage to Bua, 256

in Xavantes, 52 in XX/XY mosaic, 38 Koreans, haptoglobin subtypes in, 477 Krieger, H., 451

Lactic dehydrogenase in Xavantes, 52 Lactobacilli and caries, 231 Lamy, M., 336 Lejeune, J., 156 Lenz, W., 156 Lewis blood groups in XX/XY mosaic, 38 Lewis, M., 254, 256, 261 Li, C. C., 396

Lindsten, J., 156

Linkage

Bu^a and blood groups, 256 colorblindness and Xg, 403, 410 hairy ears and Y chromosome, 455 6PGD and G6PD, 472 6PGD and ABO, 472 6PGD and Mn, 472 Livingstone, F. B., 435 London Conference, 156 Lutheran blood groups linkage to Bu^a, 256 in Xavantes, 52

Malaria in Xavantes, 52 Mange, A. P., 484 Mann, J. D., 364, 403 Maternal age and anencephaly, 336 and mongolism, 380 and Turner's syndrome, 380 Maybury-Lewis, D., 52 Measles, effects on chromosomes, 204 Menstruation and abortion risk, 1 Metrakos, J. D., 261 Miller, J. R., 284 Miller, O. J., 156 Minnich, V., 311 MNSs blood groups in Cyprus, 267 and heterosis, 375 linkage to Bua, 256 and selection, 161 in Xavantes, 52

Mongolism, relation to maternal age and twinning, 380

Monkeys
haptoglobins in, 477
Rh-Hr blood groups, 246
Moorhead, P. S., 156
Moor-Jankowski, J., 246
Mortality in Xavantes, 52
Morton, N. E., 263, 451
Mosaicism, XX/XY, 38
Motulsky, A. G., 486
Multiple exostosis, hereditary, 351

Naiman, J. L., 195
Nance, W. E., 380
Napier, J., 161
Neel, J. V., 52, 393
Negroes
acid phosphatase types, 141
Bu^a in, 256
haptoglobins in, 419

and smallpox in Brazil, 451
Neonatal deaths, offspring of irradiated mothers, 214
Nigerians, haptoglobin subtypes, 477
Nijenhuis, L. E., 155

Orangutan, haptoglobins in, 477 Oski, F. A., 195

P blood group in Cyprus, 267 linkage to Bua, 256 and selection, 161 in Xavantes, 52 Parental age and abortion risk, 1 Patau, K., 156 Paternal age and anencephaly, 336 Penrose, L. S., 156 Personality factors and ABO types, 397 Phenylthiocarbamide (PTC) and caries, 231 Philipps, S., 256 Phosphatase, acid, of red cells, 141 6-Phosphogluconate dehydrogenase deficiency, 472 Pigmentation in XX/XY mosaic, 38 Plato, C. C., 267 Polar body, fertilization, 38 Proteins of plasma of Xavantes, 52 Puck, T. T., 156

Reed, T. E., 161
Reisman, L. E., 38
Renwick, J. H., 410
Rh blood groups
of apes and monkeys, 246
in Cyprus, 267
immunization and ABO incompatibility,
155
linkage to Bu^a, 256
linkage to eosinophilia, 195
and selection, 161
in Xavantes, 52
Robinson, A., 156
Rucknagel, D. L., 267, 311

Salzano, F. M., 52, 301 Sarkar, S. S., 455 Schmid, W., 156 Schmidt, R. P., 254 Scholte, P. J. L., 26 Schork, M. A., 292 Schulze, J., 410 Secretor types of Brazilian Indians, 301

and selection, 161 of Xavantes, 52 in XX/XY mosaic, 38 Selection and blood groups, 161 in Cyprus, 267 and G6PD deficiency, 435 and hemoglobins S and C, 435 and MN blood groups, 375 smallpox and ABO groups, 451 Sex and dental caries, 231 Sex linage of Bua, 256 Sex ratio in hereditary multiple exostosis, 351 from irradiated mothers, 214 and X radiation, 26 Shaw, M. W., 393 Shaw, R. F., 393 Shim, B.-S., 477 Shreffler, D. C., 393 Simpson, N. E., 180

Sm blood group, relation to Buⁿ, 254 Smallpox and ABO groups, 451 Smithies, O., 487 Sobels, F. H., 26 Solomon, L., 351 Soltan, H. C., 284 Soni, A., 161 Spencer, N., 141 Stern, C., 156, 455 Stillbirths and anencephaly, 336 from irradiated mothers, 214 Sutton, H. E., 419, 485

Tashian, R. E., 393
Teeth examination in Xavantes, 52
Tetraploidy in XX/XY mosaic, 38
Thai
haptoglobin subtypes, 477
Hb E and α thalassemia, 311

Suvatee, V., 311

Symon, W. E., 403

Thalassemia in Cyprus, 267 and Hb E in Thais, 311 Tjio, J. H., 156 Transferrins in Xavantes, 52 in XX/XY mosaic, 38 Tristan da Cunhan Islanders, acid phosphatase types, 141 Tuchinda, S., 311 Turner's syndrome and maternal age, 380 and twinning, 380 Twin births and anencephaly, 336 and mongolism, 380 and Turner's syndrome, 380

Uchida, I. A., 284, 380

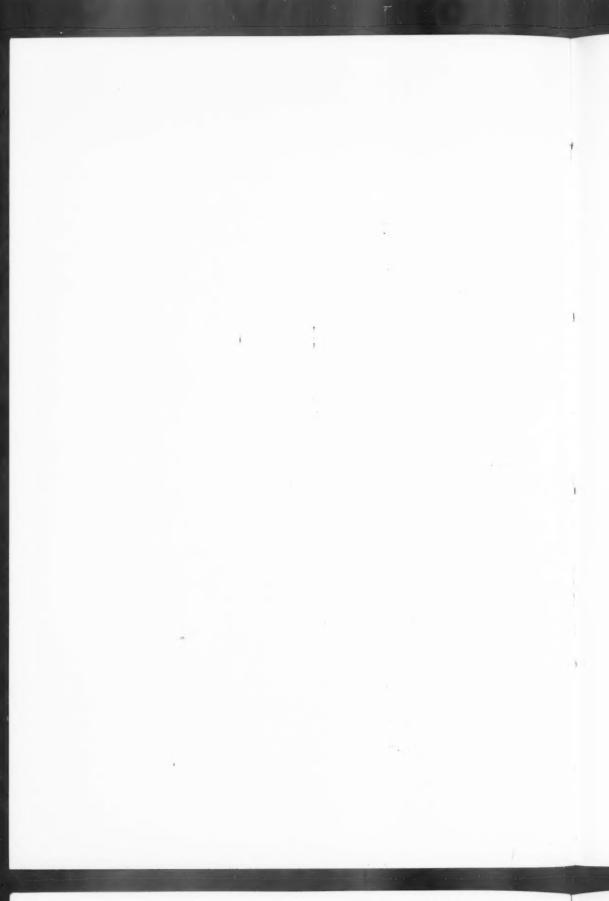
Valdmanis, A., 364 Van Dyke, H. E., 364 Virus infections and chromosomes, 204

Warburton, D., 1 White, M. J. D., 156 Wiener, A. S., 246 Witkop, C. J., 231 Wright blood group linkage to Bu^a, 256 in Xavantes, 52

Xavante Indians, genetic studies, 52 Xg blood groups linkage to colorblindness, 403, 410 origin of X in Turner's syndrome, 380 X radiation and genetic damage, 214 and sex ratio, 26

Y chromosome and hairy pinnae, 455 Young, H. B., 397

Zuelzer, W. W., 38



THE AMERICAN JOURNAL

of

HUMAN GENETICS

H. ELDON SUTTON, Editor
LEE CLAYPOOL COOPER, Editorial Assistant

Associate Editors

ELOISE R. GIBLETT

HAROLD O. GOODMAN

C. C. Li

KLAUS PATAU

WILLIAM S. POLLITZER

MARGERY W. SHAW

Volume 16 1964

Published Quarterly for
THE AMERICAN SOCIETY OF HUMAN GENETICS
By Grune and Stratton, Inc.

THE AMERICAN SOCIETY OF HUMAN GENETICS

BOARD OF DIRECTORS, 1964

President
ARTHUR G. STEINBERG, PH.D.
Western Reserve University
Cleveland

President-Elect
HOWARD NEWCOMBE, Ph.D.
Atomic Energy of Canada, Ltd.
Chalk River, Ontario

Secretary
SAMUEL H. BOYER, M.D.
Johns Hopkins Hospital
Baltimore

Treasurer
BERTRAM HANNA, PH.D.
(Deceased)
University of Indiana
Medical Center
Indianapolis

Treasurer
A. D. MERRITT, M.D.
University of Indiana
Medical Center
Indianapolis

President, 1962
F. CLARKE FRASER, PH.D., M.D.
McGill University
Montreal

President, 1963

JAMES F. CROW, PH.D.

University of Wisconsin

Madison

Editor
H. ELDON SUTTON, PH.D.
The University of Texas
Austin

ALEXANDER G. BEARN, M.D. Rockefeller Institute New York

Joseph A. Buckwalter, M.D. University of Iowa Iowa City

JAMES L. GERMAN, III, M.D.
Cornell University
Medical College
New York

STANLEY M. GARTLER, Ph.D. University of Washington Seattle

KURT HIRSCHHORN, M.D. New York University New York

ARNO G. MOTULSKY, M.D. University of Washington Seattle MARGERY W. SHAW, M.D. University of Michigan Ann Arbor

JAMES A.: SPUHLER, PH.D. University of Michigan Ann Arbor

HERMAN M. SLATIS, PH.D. Michigan State University East Lansing

Copyright, 1964, by Grune & Stratton, Inc. for The American Society of Human Genetics

All rights reserved

Printed at Olympic Press, Sheboygan, Wis.

CONTENTS

Vol. 16, No. 1, MARCH, 1964

.,	
Spontaneous Abortion Risks in Man: Data from Reproductive Histories Collected in a Medical Genetics Unit. Dorothy Warburton and F. Clarke Fraser	1
Sex Ratio Shifts among Progeny from Patients Having Received Therapeutic X-Radia-	20
tion. P. J. L. Scholte and F. H. Sobels Generalized Unbalanced Mosaicism Attributable to Dispermy and Probable Fertilization of a Polar Body. Wolf W. Zuelzer, Kathryn M. Beattle and Leonard	26
E. REISMAN Studies on the Xavante Indians of the Brazilian Mato Grosso. J. V. NEEL, F. M. SAL-	38 52
ZANO, P. C. JUNQUEIRA, F. KEITER AND D. MAYBURY-LEWIS	
CER AND H. HARRIS Letters to the Editor	
ABO Incompatibility and Rh Immunization, L. E. NIJENHUIS	100
The London Conference on "The Normal Human Karyotype." N. A. BARNI- cot et al.	
Book Reviews	158
Vol. 16, No. 2, JUNE, 1964	
A Search for Natural Selection in Six Blood Group Systems and ABH Secretion. T. Ed-	
WARD REED, HENRY GERSHOWITZ, ATMARAM SONI AND JOHN NAPIER	
The "Silent" Gene for Serum Cholinesterase. Nancy E. Simpson and W. Kalow The Inheritance of Renal Glycosuria. A. K. Khachadurian and L. A. Khachadurian	
Hereditary Eosinophilia: Report of a Family and Review of the Literature. J. LAW- RENCE NAIMAN, FRANK A. OSKI, FRED H. ALLEN AND LOUIS K. DIAMOND	
Cytogenetic Studies on Patients with Virus Infections and Subjects Vaccinated Against Yellow Fever. D. G. Harnden.	204
Investigation of Possible Genetic Damage in the Offspring of Women Receiving Multiple Diagnostic Pelvic X rays. DIANE WILSON COX.	
A Genetic Study of Dental Caries with Special Reference to PTC Taste Sensitivity. C. S. Chung, C. J. Witkop and J. L. Henry	
Blood Groups of Apes and Menkeys. IV. The Rh-Hr Blood Types of Anthropoid Apes	201
A. S. Wiener, J. Moor-Jankowski and E. B. Gordon	246
A Possible Relationship between the Blood Group Antigens Sm and Bu ^a . Marion Lewis, Bruce Chown, R. Pauline Schmidt and James J. Griffitts	254
Further Observations on the Blood Group Antigen Bua. MARION LEWIS, BRUCE CHOWN,	204
HIROKO KAITA AND SYLVIA PHILIPPS	256
Letter to the Editor Inheritance of Blood Group Antigens in a Largely Eskimo Population Sample.	
Marion Lewis, Bruce Chown and Hiroko Kaita	261
Books Reviews	
Vol. 16, No. 3, SEPTEMBER, 1964	
Studies on the Distribution of Gluc-6-Phosphate Dehydrogenase Deficiency, Thalas-	
senia, and Other Genetic Traits in the Coastal and Mountain Villages of Cyprus.	007
C. C. Plato D. L. Rucknagel and H. Gershowitz	207
UCHIDA, JAMES R. MILLER AND HUBERT C. SOLTAN	
THE RESERVE OF INDESCRIPT ON LECOURD M. ANTHONY SCHOOL	7547

CONTENTS

Salivary Secretions of Indians from Santa Catarina, Brazil. Francisco M. Salzano The Coexistence of the Genes for Hemoglobin E and α Thalassemia in Thais, with Resultant Suppression of Hemoglobin E Synthesis. Soodsarkorn Tuchinda, Donald L. Rucknagel, Virginia Minnich, Urapol Boonyaprakob, Kampanad	301
BALANKURA AND VINAI SUVATEE	311
Anencephaly in France. J. Frézal, J. Kelley, M. L. Guillemot and M. Lamy	
Hereditary Multiple Exostosis. L. Solomon	
Probable Deletion of the Short Arm of Chromosome 18, Harold E, Van Dyke, Aina	
VALDMANIS AND JOSEPH D. MANN	
Are the MN Blood Groups Maintained by Heterosis? Yuichiro Hiraizumi	
Turner's Syndrome, Twinning, and an Unusual Variant of Glucose-6-Phosphate De-	
hydrogenase. Walter E. Nance and Irene Uchida	
Book Reviews	393
Vol. 16, No. 4, DECEMBER, 1964	
Blood Groups and Personality Traits. R. B. CATTELL, H. BOUTOURLINE YOUNG AND	
J. D. Hundleby	397
X Chromosome Mapping of Genes for Red-Green Colorblindness and Xg. Charles E.	
Jackson, William E. Symon and Joseph D. Mann	403
An Analysis of Some Data on the Linkage Between Xg and Colorblindness in Man.	
J. H. Renwick and Jane Schulze	410
Variations in Heterozygous Expression at the Haptoglobin Locus. H. Eldon Sutton	***
	419
Aspects of the Population Dynamics of the Abnormal Hemoglobin and Glucose-8-	
Phosphate Dehydrogenase Deficiency Genes. Frank B. Livingstone	435
Smallpox and the ABO Blood Groups in Brazil. ELIANE AZEVÉDO, H. KRIEGER AND	
N. E. Morton	451
New Data on the Problem of Y-Linkage of Hairy Pinnae. Curt Stern, W. R. Center-	
	455
A New Inherited Enzymatic Deficiency of Human Erythrocytes: 6-Phosphogluconate	
Dehydrogenase Deficiency, George J. Brewer and Raymond J. Dern	472
The Distribution of Haptoglobin Subtypes in Various Populations, Including Subtype	
Patterns in Some Nonhuman Primates. Bong-Sop Shim and Alexander G.	
Bearn	477
Letters to the Editor	
Fortran Programs for Computing Wright's Coefficient of Inbreeding in Human	
and Nonhuman Pedigrees. ARTHUR P. MANGE	484
Book Reviews	485
The William Allan Memorial Award	

